

## **IN THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

### **Listing of Claims**

1-24. (canceled)

25. (currently amended) A method for accessing one or more additional services temporarily included within a respective main service provided by a respective service provider, by means of a uni-directional broadcasting information flow between a transmitting device and a receiving device, said method using a receiving device adapted to be connected to said respective service provider, comprising the steps of:

extracting from a main service uni-directionally broadcasted by said service provider presently received by said receiving device service information about at least one of said corresponding additional services;

accessing at least one of said additional services about which service information was extracted according to said respective extracted service information;

storing said extracted service information in said receiving device; and

updating said stored service information each time the extracting step is executed.

26. (previously presented) The method according to claim 25, wherein the extracting step further comprises extracting a service identification and a service name of at least one of said additional services.

27. (previously presented) The method according to claim 25, wherein the extracting step further comprises extracting time information including transmission times of at least one of said additional services.

28. (previously presented) The method according to claim 25, wherein the extracting step further comprises extracting service channel information of at least one additional service showing which service channel will be used when transmitting a corresponding additional service from a corresponding service provider via said service channel to said receiving device, respectively.

29. (previously presented) The method according to claim 28, wherein the accessing step further comprises connecting said receiving device to at least one of said service channels according to said service channel information and said time information.

30. (previously presented) The method according to claim 25, further comprising:

activating said receiving device, or necessary parts thereof, for receiving a service during time intervals in which an additional service is transmitted from the corresponding service provider to said receiving device; and

returning said receiving device or said parts thereof into the state before activation during the rest of the time,

wherein said processes of activating and returning are carried out on the basis of said stored service information or said latest extracted service information.

31. (previously presented) The method according to claim 25, further comprising:

managing the time order of different accessing processes, when said additional services assigned thereto are transmitted at the same time to said receiving device, respectively,

wherein said managing process is performed according to said stored service information or said latest extracted service information.

32. (previously presented) The method according to claim 25, further comprising subscribing to a service list containing entries representing available additional services of respective service providers,

wherein said process of subscribing changes said stored service information.

33. (previously presented) The method according to claim 30, wherein, if the receiving device is in its activated state, only accessing additional services that are transmitted over service channels used by said main services presently received or that have a specific priority level.

34. (previously presented) The method according to claim 32, further comprising the step of eliminating subscribed services in said service list which have no specific priority level when the power resources of said receiving device fall below a predetermined limit.

35. (previously presented) The method according to claim 25, further comprising the step of monitoring all additional services provided by a corresponding service provider during the time in which said receiving device receives a main service from said corresponding service provider.

36. (previously presented) The method according to claim 25, further comprising the step of storing service data extracted from said at least one additional service, after having accessed them in the accessing step, in said receiving device, such that said stored service data are accessible.

37. (currently amended) A method of accessing at least one additional service temporarily included within a respective main service provided by a respective service provider by means of a uni-directional broadcasting information flow between a transmitting device and a receiving device, said accessing process using a receiving device connectable to said respective service provider, comprising the steps of:

extracting from a main service uni-directionally broadcasted by said service provider presently received by said receiving device service information about at least one of said corresponding additional services;

accessing at least one of said additional services about which service information was extracted according to said respective extracted service information;

activating said receiving device or necessary parts thereof for receiving a service during time intervals in which an additional service is transmitted from the corresponding service provider to said receiving device; and

returning said receiving device or said parts thereof into the state before activation during the rest of the time,

wherein said processes of activating and returning are performed on the basis of stored service information or latest extracted service information.

38. (previously presented) The method according to claim 37, wherein the extracting step further comprises extracting a service ID and a service name of at least one of said additional services.

39. (previously presented) The method according to claim 37, wherein the extracting step further comprises extracting time information including transmission times of at least one of said additional services.

40. (previously presented) The method according to claim 37, wherein the extracting step further comprises extracting service channel information of at least one additional service showing which service channel will be used when transmitting a corresponding additional service from a corresponding service provider via said service channel to said receiving device, respectively.

41. (previously presented) The method according to claim 40, wherein the accessing step further comprises connecting said receiving device to at least one of said service channels according to said service channel information and said time information.

42. (previously presented) The method according to claim 37, further comprising the step of storing said extracted service information in said receiving device.

43. (previously presented) The method according to claim 42, further comprising the step of updating said stored service information each time the extracting step is executed.

44. (previously presented) The method according to claim 37, further comprising the step of managing the time order of different accessing processes, if said additional services assigned thereto are transmitted at the same time to said receiving device, respectively, said managing process being done according to said stored service information or said latest extracted service information.

45. (previously presented) The method according to claim 42, further comprising the step of subscribing to a service list containing entries representing available additional services of respective service providers, said process of subscribing changing said stored service information.

46. (previously presented) The method according to claim 37, further comprising the step of accessing additional services that are transmitted over service channels used by said main services presently received or that have a specific priority level, when the receiving device is in an activated state.

47. (previously presented) The method according to claim 45, further comprising the step of eliminating subscribed services in said service list which do not have a specific priority level if the power resources of said receiving device fall below a predetermined limit.

48. (previously presented) The method according to claim 37, further comprising the step of monitoring all additional services provided by a corresponding service provider during the time in which said receiving device receives a main service from said corresponding service provider.

49. (previously presented) The method according to claim 37, further comprising the step of storing service data extracted from said at least one additional service after having accessed them in the accessing step in said receiving device, said stored service data being accessible.

50. (currently amended) A method of accessing at least one additional service temporarily included within a respective main service provided by a respective service provider by means of a uni-directional broadcasting information flow between a transmitting device and a

receiving device, said accessing process using a receiving device connectable to said respective service provider, comprising the steps of:

extracting from a main service uni-directionally broadcasted by said service provider presently received by said receiving device service information about at least one of said corresponding additional services;

accessing at least one of said additional services about which service information was extracted according to said respective extracted service information; and

when the receiving device is in its activated state, only accessing additional services that are transmitted over service channels used by said main services presently received or that have a specific priority level.

51. (previously presented) The method according to claim 50, wherein the extracting step further comprises extracting a service identification and a service name of at least one of said additional services.

52. (previously presented) The method according to claim 50, wherein the extracting step further comprises extracting time information including transmission times of at least one of said additional services.

53. (previously presented) The method according to claim 50, wherein the extracting step further comprises extracting service channel information of at least one additional service showing which service channel will be used when transmitting a corresponding



additional service from a corresponding service provider via said service channel to said receiving device, respectively.

54. (previously presented) The method according to claim 53, wherein the accessing step further comprises connecting said receiving device to at least one of said service channels according to said service channel information and said time information.

55. (previously presented) The method according to claim 50, further comprising the step of storing said extracted service information in said receiving device.

56. (previously presented) The method according to claim 55, further comprising the step of updating said stored service information each time the extracting step is executed.

57. (previously presented) The method according to claim 50, further comprising:

activating said receiving device or necessary parts thereof for receiving a service during time intervals in which an additional service is transmitted from the corresponding service provider to said receiving device; and

returning said receiving device or said parts thereof into the state before activation during the rest of the time,

wherein said processes of activating and returning are performed on the basis of stored service information or latest extracted service information.

58. (previously presented) The method according to claim 50, further comprising the step of:

managing the time order of different accessing processes, if said additional services assigned thereto are transmitted at the same time to said receiving device, respectively, wherein said managing process is performed according to said stored service information or said latest extracted service information.

59. (previously presented) The method according to claim 55, further comprising the step of subscribing to a service list containing entries representing available additional services of respective service providers,

wherein said process of subscribing changes said stored service information.

60. (previously presented) The method according to claim 59, further comprising the step of eliminating subscribed services in said service list which do not have a specific priority level if the power resources of said receiving device fall below a predetermined limit.

61. (previously presented) The method according to claim 50, further comprising the step of monitoring all additional services provided by a corresponding service provider during the time in which said receiving device receives a main service from said corresponding service provider.

62. (previously presented) The method according to claim 50, further comprising the step of storing service data extracted from said at least one additional service following the accessing step.

63. (currently amended) A broadcast signal transmitted configured and adapted for transmission as a uni-directional information flow comprising a main service from a respective transmitting device of a service provider to a receiving device for providing said receiving device with a main service, the broadcast signal comprising:

service information about at least one additional service provided by said service provider indicating how to access said at least one additional service; and

time information about transmission times of said at least one additional service, wherein said time information is structured so that it comprises at least one relative time to a full hour if said corresponding additional service is transmitted every hour, or at least one offset to the time of the beginning of the day plus at least one repetition rate of said corresponding additional service.

64. (previously presented) The broadcast signal according to claim 63, further comprising service channel information about at least one additional service showing which service channel will be used when transmitting an additional service from a service provider via said service channel to said receiving device, respectively.

65. (previously presented) The broadcast signal according to claim 63, further comprising a service ID and/or a service name and/or priority information of at least one service.

66. (currently amended) An apparatus for accessing at least one additional service provided by at least one service provider by means of a uni-directional broadcasting information flow between a respective transmitting device of said at least one service provider and a receiving device of said apparatus, said apparatus comprising:

receiving means connectable via at least one service channel to said at least one service provider for receiving and extracting at least one additional service from a main service uni-directionally broadcasted by said at least one service provider;

a user interface for informing a user and for controlling said apparatus by said user; and

a processing unit connected to said receiving means and to said user interface, the processing unit comprising:

a scheduler means connected to said processing unit for controlling said process of accessing said at least one additional service;

a service information memory means for storing service information needed by said scheduler means to control said apparatus; and

a service data memory means connected to said processing unit for storing service data extracted by said receiving means from said at least one additional service according to said service information,

wherein said scheduler means comprises a wake-up control means connected to said receiving means and said processing unit for activating said receiving means and said processing unit or necessary parts thereof for receiving a service during time intervals in which an additional service is transmitted from the corresponding service provider to said receiving

device, returning said receiving device or said parts thereof into the state before activation during the rest of the time, said processes of activating and returning being carried out on the basis of said stored service information or latest extracted service information.

67. (previously presented) The apparatus according to claim 66, further comprising a conditional access means to decrypt an encrypted service to permit access.